

BRIDGE CONSISTS OF

- 2 - 50'-0" TYPE II PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 -126'-0" BULB TEE, 65 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 3 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)  
(L = 4'-0"; W = 1'-1"; H = 2'-8")
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ----- 156.8 SQ MILES					
FLOOD FREQUENCY	TOTAL DISCHARGE	DISCHARGE THRU BRIDGE	AREA OF OPENING BELOW FLOODSTAGE	MEAN VELOCITY	BACKWATER
10 YEAR	9021 CFS	6083 CFS	2859 SQ FT	2.13 FPS	0.31 FT
100 YEAR	17138 CFS	11406 CFS	3964 SQ FT	2.88 FPS	0.46 FT
500 YEAR	24294 CFS	13822 CFS	4497 SQ FT	3.07 FPS	0.59 FT

TRAFFIC DATA

TRAFFIC -----		ADT = 150 (2009)
		ADT = 250 (2029)
DESIGN SPEED -----		55 MPH
TRUCKS -----		23 %
24 HR TRUCKS -----		25 %
DIRECTIONAL -----		65 %

UTILITIES

NONE

GENERAL NOTES

- SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY CONTRACT DOCUMENTS.
- REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.
- CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
- TRAFFIC CONTROLS - ROAD TO BE CLOSED DURING BRIDGE CONSTRUCTION. SEE ROADWAY PLANS FOR DETOUR, TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.
- EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:  
[HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX](http://www.dot.ga.gov/doingbusiness/research/pages/roaddesignsearch.aspx)  
THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER R.R.-P.R.2462(2).
- WAITING PERIOD - NONE REQUIRED.
- △ COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2, 3 AND 4.
- FOUNDATION BACKFILL MATERIAL - PLACE 1'-0" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER EACH FOOTING AT BENTS 2, 3, AND 4. THE QUANTITY IS BASED ON THE PLAN FOOTING DIMENSIONS PLUS 2'-0".
- PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.
- PILE DRIVING - SHOULD PILES FAIL TO OBTAIN DRIVING RESISTANCE AFTER ACHIEVING THE MINIMUM PILE TIP ELEVATION, ALLOW PILES TO FREEZE A MINIMUM OF 24 HOURS AND RESTRIKE WITH A WARM HAMMER.
- DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 2 AND 4.
- PDA TESTING - PILE DATA ANALYZER WILL BE UTILIZED BY THE GEORGIA DOT DURING THE PILE DRIVING OPERATION. NOTIFY THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AND RESEARCH AT 404-363-7546 TWO WEEKS PRIOR TO DRIVING PILES.
- HIGH PERFORMANCE CONCRETE (HPC) - PRESTRESSED CONCRETE BEAMS FOR SPANS 2 AND 3 OF THIS BRIDGE UTILIZE HIGH PERFORMANCE CONCRETE. SPECIAL REQUIREMENTS ARE REQUIRED AS DETAILED IN SPECIAL PROVISION SECTIONS 500 AND 865. HPC BEAMS WILL BE PAID FOR AS "PSC BEAMS".
- SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.
- GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.
- STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1 1/4 ". SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.
- WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND RESEARCH. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.
- SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.
- INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

DESIGN DATA

- SPECIFICATIONS ----- AASHTO 17TH EDITION, 2002  
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)
- TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED
- FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT
- CONCRETE: SUPERSTRUCTURE ----- CLASS AA,  $f'_c = 3,500$  PSI  
PSC BEAMS ----- CLASS AAA,  $f'_c =$  SEE BEAM SHEETS  
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS  
SUBSTRUCTURE ----- CLASS AA,  $f'_c = 3,500$  PSI
- REINFORCEMENT STEEL: ----- GRADE 60,  $f_y = 60,000$  PSI
- PRETENSIONING STRANDS: -----  $f'_s = 270,000$  PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
207-0203	20	CY	FOUND BKILL MATL, TP II
211-0300	147	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	1017	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (325)
500-2100	692	LF	CONCRETE BARRIER
500-3002	135	CY	CLASS AA CONCRETE
507-9002	389	LF	PSC BEAMS, AASHTO TYPE II, BR NO - 1
507-9034	1001	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 1
511-1000	18460	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (83584)
520-1125	665	LF	PILING IN PLACE, STEEL H, HP 12 X 53
520-1147	1125	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-4125	1	EA	LOAD TEST, STEEL H, HP 12 X 53 (IF REQD)
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
△ 525-1000	6	EA	COFFERDAMS
540-1102	LUMP	LS	REMOVAL OF EXISTING BR, BR NO - 1
603-2024	2000	SY	STN DUMPED RIP RAP, TP I, 24 IN
603-7000	2000	SY	PLASTIC FILTER FABRIC

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DRAWING NO. 35-02	BRIDGE SHEET 2 OF 15	DATE 5/2/2010	REVISIONS BY 3/13	ADDED COFFERDAM NOTE AND PAY ITEM	BRIDGE NO. 1	GEORGIA DEPARTMENT OF TRANSPORTATION PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN	GENERAL NOTES C. R. 84 (UNION CHURCH ROAD) OVER PATAULA CREEK QUITMAN CO. BRZLB-0239-00(003)	NO SCALE	DECEMBER 2009	DESIGNED JLM DRAWN EMM	CHECKED RAG DESIGN GROUP RAG	REVIEWED WEI/WMD APPROVED PVL
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